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EXAMINER

WALFORD, NATALIE K

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Please find below and/or attached an Office communication concerning this application or proceeding.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HAJIME KIMURA

Appeal 2008-3152
Application 09/837,105
Technology Center 2879

Decided:¹ June 29, 2009

Before KENNETH W. HAIRSTON, JOSEPH F. RUGGIERO, and
ROBERT E. NAPPI, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is an appeal under 35 U.S.C. §§ 6(b) and 134 from the final rejection of claims 56 to 64 and 78 to 88. We will reverse.

The disclosed invention relates to light extraction and scattering from a light scattering body of a light emitting display device. The light is extracted and scattered from a surface of the light scattering body that faces away from an abutting substrate. An inner angle between the surface of the light scattering body that abuts the substrate and the opposite scattering and extracting surface of the light scattering body is not less than 60° and is less than 180° (Fig. 4A; Spec. 6 and 7).

Claim 56 is representative of the claims on appeal, and it reads as follows:

56. A light emitting display device comprising:
a substrate;
a first electrode formed over a first surface of the substrate;
an EL layer formed over the first electrode;
a second electrode formed over the EL layer; and
a light scattering body having a first surface and a second surface, formed on a second surface of the substrate, which is opposite to the first surface of the substrate,
wherein the first surface of the light scattering body is in contact with the second surface of the substrate,
wherein the second surface of the light scattering body is for scattering and extracting a light, and
wherein an inner angle between the first surface of the light scattering body and the second surface of the light scattering body is not less than 60° and is less than 180°.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Ooi	US 5,206,746	Apr. 27, 1993
Jones	US 5,920,080	Jul. 6, 1999
Shibata	US 6,147,451	Nov. 14, 2000

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Abe US 6,617,784 B1

Sep. 9, 2003
(filed Jun. 8, 1998)

Duggal US 6,777,871 B2

Aug. 17, 2004
(filed Mar. 31, 2000)

The Examiner rejected claims 56, 59 to 62, 64, 80, 82 to 84, 86, and 88 under 35 U.S.C. § 103(a) based upon the teachings of Abe and Ooi.

The Examiner rejected claims 57 and 58 under 35 U.S.C. § 103(a) based upon the teachings of Abe, Ooi, and Jones.

The Examiner rejected claim 63 under 35 U.S.C. § 103(a) based upon the teachings of Abe, Ooi, and Shibata.

The Examiner rejected claims 78, 79, 81, 85, and 87 under 35 U.S.C. § 103(a) based upon the teachings of Abe, Ooi, and Duggal.

The Examiner acknowledges (Final Rej. 2), and Appellant agrees (Br. 11), that Abe does not disclose the claimed feature wherein an “inner angle between the first surface of the light scattering body and the second surface of the light scattering body is not less than 60° and is less than 180°.” The Examiner states (Final Rej. 2 and 3) that Ooi discloses a light scattering body wherein “an inner angle between the first surface (7) of light scattering body (2) and the second surface (4A) of the light scattering body (2) is not less than 60 degrees and is less than 180 degrees (see column 6, lines 41 to column 7, line 6).” In view of the teachings of Ooi, the Examiner is of the opinion (Final Rej. 3) that it would have been obvious to one of ordinary skill in the art to use the light scattering prism of Ooi in place of the light scattering body of Abe in order

to obtain a transparent-scattering type optical device having a symmetric viewing angle with respect to the front face, capable

of reducing the loss of the light volume of the illumination means disposed at the back side of the optical device, and providing a bright display and a high contrast ratio.

Appellant argues (Br. 15 to 18) that the light scattering body in Ooi is directed to a reflection-type device that absorbs and reflects light, and is not designed for scattering and extracting light as set forth in the claims on appeal.

Appellant has not challenged the Examiner's findings (Final Rej. 2) that Abe describes all of the claim 56 light emitting display device structure except for the claimed inner angle that is "not less than 60° and is less than 180°."

Although Ooi describes angles that are substantially similar to the claimed angles (Abstract; col. 6, l. 50 to col. 7, l. 6), the noted second surface 4A of the prism 2 functions to reflect light to the apex of the prism where it is absorbed by light absorbing faces 5A and 5B (col. 5, ll. 48 to 56; col. 9, ll. 8 to 17; col. 10, ll. 4 to 22). The reflection and absorption of light in the prism 2 in Ooi is counter to the operation of Abe and to the "scattering and extracting" of light from the claimed second surface of the light scattering body.

Thus, we agree with the Appellant's arguments that the combined teachings of the references fail to teach or suggest a light emitting display device wherein "the second surface of the light scattering body is for scattering and extracting a light" when the "inner angle" between the first and second surfaces of the light scattering body are as set forth in the claims on appeal.

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In summary, the obviousness rejection of claims 56, 59 to 62, 64, 80, 82 to 84, 86, and 88 is reversed because the Examiner's articulated reasons for combining the teachings of the references to Abe and Ooi do not support a legal conclusion of obviousness. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

The obviousness rejections of claims 57, 58, 63, 78, 79, 81, 85, and 87 are reversed because the teachings of Jones, Shibata, and Duggal fail to cure the noted shortcomings in the teachings of Abe and Ooi.

The decision of the Examiner is reversed.

REVERSED

gvw

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